

Section 985

SAMPLE REDUCTION METHODS

985.01 Field Splitting

985.02 Purpose

This procedure covers the splitting of bituminous paving mixes, including hot mix asphalt (HMA) and cold mix asphalt field samples into the appropriate portions for correlation testing.

985.03 Apparatus

- Gilson Quartermaster or equivalent equipment with a sample loading devise.
- Riffle Splitter with a storage capacity of 66 lbs minimum.
- Miscellaneous equipment including non-asbestos heat-resistant gloves or mittens, pans, buckets, cans, cooking spray.

985.04 Procedure

Mix the material thoroughly prior to loading into the Quartermaster or Splitter. Coat Quartermaster or Splitter with a light coat of cooking spray. Do not heat the equipment above 284°F Load samples in a uniform manner, i.e circular or cyclical motion. For bulk samples with a gross mass greater than 66 lbs, split/reduce the sample using the Quartermaster or Riffle Splitter to less than 66 lbs. For bulk samples with a gross weight less than 66 lbs, split/reduce the sample using the Riffle Splitter.

Note: All material from the sample must be split/reduced at the same time. Multiple splits/reductions may not be combined.

985.05 Sample Reduction for Testing

985.06 Purpose

This procedure covers the reduction of bituminous paving mixes, including hot mix asphalt (HMA) and cold mix asphalt field samples to the appropriate testing size in general accordance with AASHTO T 248, Method A.

985.07 Apparatus

- Riffle Splitter with a storage capacity of 66 lbs minimum.
- Large spatulas, trowels, thin metal plate, or sheet metal quartering splitter
- Thermostatically controlled oven capable of attaining a temperature of at least 230°F or high enough to make the material pliable enough to split
- Miscellaneous equipment including trowel(s), spatula(s), hot plate, non-asbestos heat-resistant gloves or mittens, pans, buckets, cans, cooking spray.

985.08 Procedure

Warm the sample in the oven until it can be separated and mixed if the sample is not sufficiently soft to separate easily. Heat the trowel(s), spatula(s), etc. to approximately 230°F and coat the splitter with an approved form release agent (Pam). Do not heat splitting apparatus above 284°F. For bulk samples with a gross weight greater than 66 lbs, reduce the sample using the Quartermaster or Riffle Splitter to less than 66 lbs. For bulk samples with a gross weight less than 66 lbs, reduce the sample using the Riffle Splitter. Mix the material thoroughly by blending sample through the Splitter to provide thorough mixing of the bulk samples. Samples will be placed through the Riffle Splitter in a uniform manner in order to produce a final sample size in accordance with test method requirements. Reduce all material from the sample through the use of the splitter. “Pinches,” (i.e. using a trowel or spatula to scoop a small amount of material) will not be allowed. Reduce samples to within $\pm 5\%$ of recommended test size.